ODS 264

OBSTRUCTION DATA SHEET

ODS 264
MINNEAPOLIS - ST. PAUL INTERNATIONAL (WOLD - CHAMBERLAIN) AIRPORT
MINNEAPOLIS, MINNESOTA

DIGITIZED FROM

OC 264
SURVEYED SEPTEMBER 1990
13TH EDITION

PREPARED AND DISTRIBUTED BY
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FOR THE FEDERAL AVIATION ADMINISTRATION

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ATTENTION

See SPECIAL NOTICES in "Dates of Latest Editions, Airport Obstruction Charts - Obstruction Data Sheets," for possible corrections. National Oceanic and Atmospheric Administration (NOAA) publications are available through NOAA Distribution Branch (N/CG33), National Ocean Service, Riverdale, MD 20737. Telephone: 301-436-6990

OBSTRUCTION DATA SHEET

The Obstruction Data Sheet (ODS) provides digital obstruction and runway data for use in aircraft arrival and departure planning. This information has been obtained using field survey and photogrammetric methods by the Photogrammetry Branch of the National Ocean Service in accordance with Federal Aviation Regulations Part 77 (FAR-77), "Objects Affecting Navigable Airspace" and FAA Nr. 405, "Specifications - Airport Obstruction Chart and Related Products."

The ODS is a derivative of the Airport Obstruction Chart (OC). The source OC is indicated on the ODS cover. All objects, both obstructing and nonobstructing, that carry an elevation on the OC are listed in the ODS. The ODS (and OC) depict a representation of objects that existed at the time of the OC field survey.

ODS information is arranged as follows:

1. Objects located in FAR-77 approach (including supplemental approaches if present) or primary areas are listed with the associated runway (reference runway). For example, all objects in the Runway 9R approach or primary are listed with Runway 9R. Distances to these objects are computed from both the physical end and threshold of Runway 9R. Objects in the Runway 27L approach or primary are listed with Runway 27L. (Objects in the common 9R/27L primary area are listed with both runways.)

2. All objects not included in "1" above are listed with the Airport Reference Point (ARP).

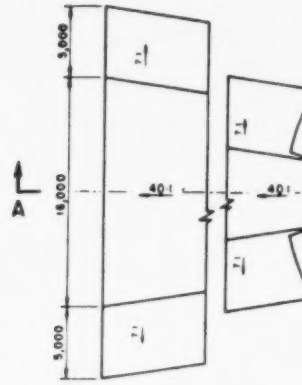
3. Runway configuration and runway lengths, widths, and elevations are presented on the ODS last page.

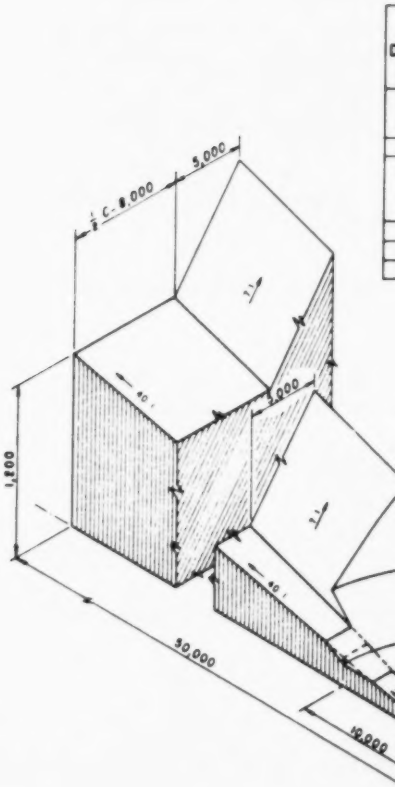
The FAR-77 imaginary approach surfaces for which the obstruction surveys were performed are coded in the ODS as follows (see footnote 2 on page 3):

A(V) ..... Utility runway - visual approach only
A(NP) .... Utility runway - nonprecision instrument approach
B(V) ..... Nonutility runway - visual approach only
C .... Nonutility runway - nonprecision instrument approach with visibility minimums greater than 3/4 mile
D .... Nonutility runway - nonprecision instrument approach with visibility minimums as low as 3/4 mile
PIR ..... Precision instrument runway
SUPLC ... Supplemental C underlying a B(V)

FAR-77 imaginary surface dimensions are defined on page 2 of this report.

Primary surface width is determined by the widest approach at the two approach/primary interfaces for that runway.





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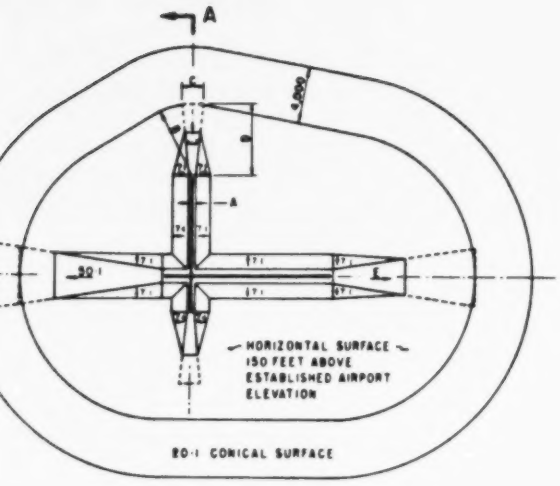
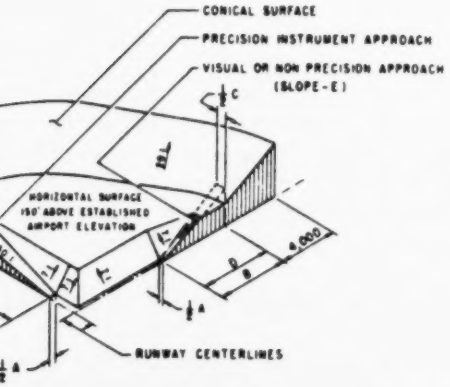
FAR-7
IMAG



ITEM	DIMENSIONAL STANDARDS (FEET)					
	VISUAL RUNWAY		NON-PRECISION INSTRUMENT RUNWAY			PRECISION INSTRUMENT RUNWAY
	A	B	A	B		
				C	D	
WIDTH OF PRIMARY SURFACE AND APPROACH SURFACE WIDTH AT INNER END	250	500	500	500	1,000	1,000
RADIUS OF HORIZONTAL SURFACE	5,000	5,000	5,000	10,000	10,000	10,000
	VISUAL APPROACH		NON-PRECISION INSTRUMENT APPROACH			PRECISION INSTRUMENT APPROACH
	A	B	A	B		
				C	D	
APPROACH SURFACE WIDTH AT END	1,250	1,500	2,000	3,500	4,000	16,000
APPROACH SURFACE LENGTH	5,000	5,000	5,000	10,000	10,000	*
APPROACH SLOPE	20:1	20:1	20:1	34:1	34:1	*

A- UTILITY RUNWAYS
B- RUNWAYS LARGER THAN UTILITY
C- VISIBILITY MINIMUMS GREATER THAN 3/4 MILE
D- VISIBILITY MINIMUMS AS LOW AS 3/4 MILE
* PRECISION INSTRUMENT APPROACH SLOPE IS 50:1 FOR INNER 10,000 FEET AND 40:1 FOR AN ADDITIONAL 40,000 FEET



VIEW OF SECTION A-A

CIVIL AIRPORT
NARY SURFACES

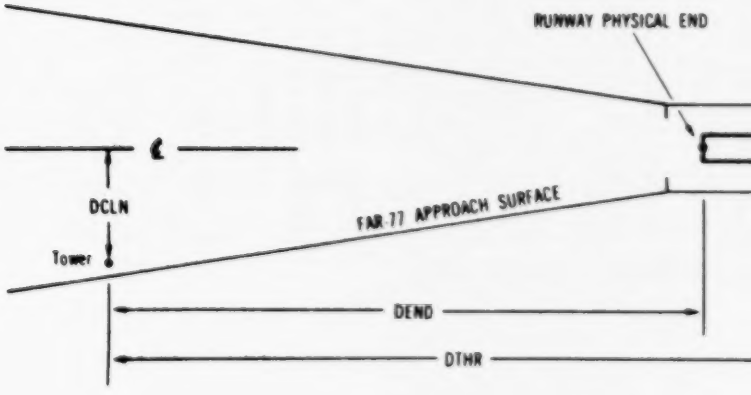
ANNOTATION

OC XXXX

AIRPORT ELEVATION XXXX

X^1	X^2 XXXX/XXXX^3	XXXXXX.XXX^4	XXXXXXX.XXX^4	

OBJECT	LAT	LONG
XXXXXXXXXXX	XXXXXX.XXX	XXXXXXX.XXX
XXXXXXXXXXX	XXXXXX.XXX	XXXXXXX.XXX



F ODS DATA FORMAT

XXXXXXX[5] XXXX/XXXX[6] XXXXXX.XXX[7] XXXXXXX.XXX[7]

A[8] ELEV[9] AGL[10] HAR[11] HAT[11] HAA[11] DEND[12] DTHR[12] DCLN[12] PNTR[13]

XX XXXX XXXX XXX XXX XXX XXXXX XXXXX XXXX XXXX
XX XXXX XXXX XXX XXX XXX XXXXX XXXXX XXXX XXXX

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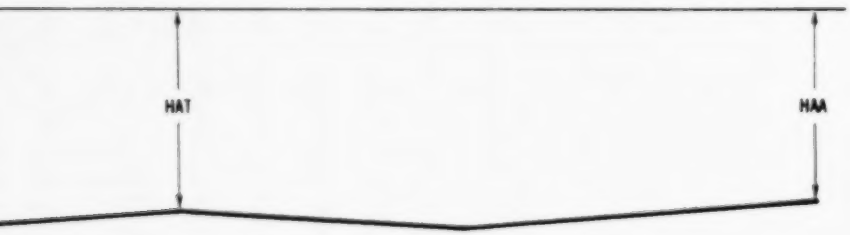
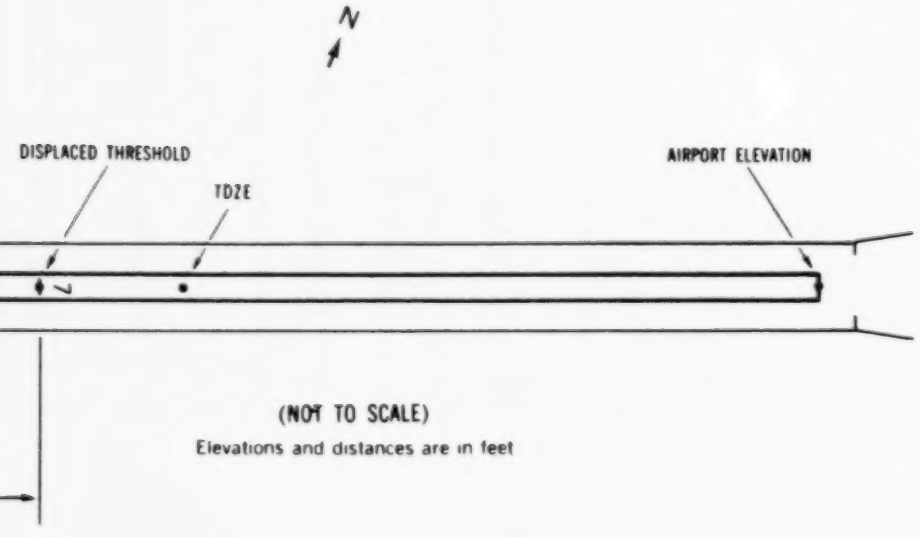




(NOT TO SCALE)

Elevations and distances are in feet

EXPLA

[1] Data block identifier. If a ru
this data block will contain da
objects in the FAR-77 approach
ARP is entered, this data block
relative to all objects not in

[2] For the reference runway, the l
obstruction survey was performe

[3] Reference runway approach physi

[4] Latitude and longitude of refer

[5] Reference runway geodetic azimu

[6] Reference runway displaced thre

[7] Latitude and longitude of refer

[8] Accuracy Code: Horizontal
1 = 20
2 = 40

[9] Mean Sea Level (MSL) elevation
feet added to noninterstate roa
feet added to railroad tracks.

[10] Height above ground level (AGL
appearing on the OC that are e
accuracy is ±10 feet.

[11] HAA - Height above airport
HAR - Height above reference r
HAT - Height above reference r

[12] DEND - Distance along referenc
to object to reference
DTHR - Distance along referenc
to object to reference
DCLN - Distance left (L) or ri
observed facing forward

A negative value for DEND or D
roll-out side of zero distance

[13] PNTR - Penetration of indicate
footnote 2).

ATION OF FOOTNOTES

way number is entered (reference runway),
a pertinent to the reference runway and to
nd primary area of the reference runway. If
will contain the ARP position and data
n FAR-77 approach or primary area.

west FAR-77 approach surface for which an
. (More than one surface may be surveyed.)

al end elevation/touchdown zone elevation

nce runway approach physical end

h reckoned clockwise from south

hold elevation/touchdown zone elevation

nce runway displaced threshold

Vertical
A = 2
B = 5
C = 20

t top of object. This value includes 15
s, 17 feet added to interstate roads, and 23

. AGLs are provided only for those objects
ual to, or greater than, 200 feet AGL. AGL

nway approach physical end
nway touchdown zone elevation

runway centerline from point perpendicular
unway approach physical end
runway centerline from point perpendicular
unway threshold
nt (R) of reference runway centerline as
in a landing aircraft.

HR indicates object is in primary area on
point.

FAR-77 approach or primary surface (see

OC0264

AIRPORT ELEVATION 841

4 PIR 831/831 445239.474N 0931350.123W 2

OBJECT	LAT	LONG
OL ON GLIDE SLOPE	445327.26	0931248.40
OL ON GLIDE SLOPE	445251.08	0931343.62
APPROACH LIGHT	445225.16	0931410.12
TREE	445221.62	0931434.65
MOBILE CRANE	445142.49	0931441.65
ANTENNA ON OL BUILDING	445137.89	0931506.55

22 PIR 830/ 445337.106N 0931229.027W 0450

OBJECT	LAT	LONG
OL ON GLIDE SLOPE	445251.08	0931343.62
OL ON GLIDE SLOPE	445327.26	0931248.40
OL ON LOCALIZER	445340.25	0931224.60
ANTENNA ON OL BUILDING	445342.52	0931227.68
FENCE	445338.09	0931218.16
FENCE	445347.08	0931226.93
TREE	445349.47	0931223.37
LIGHT POLE	445345.18	0931214.65
TREE	445350.92	0931219.90
TREE	445349.63	0931216.62
LIGHT STANDARD	445355.60	0931217.11
LIGHT STANDARD	445356.48	0931212.40
TREE	445401.35	0931206.83
TREE	445406.71	0931204.66
ROD ON OL STACK	445412.61	0931149.30
VENT ON BUILDING	445449.90	0931118.60
ANTENNA ON WATER TANK	445503.51	0930959.32

*Probable maximum ob

50012

A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
1A	859		28	28	18	-6564		280L	32
1A	861		30	30	20	-1162		500L	31
1A	833		2	2	-8	2043		6R	-35
1A	889		58	58	48	3546		989L	-9
1A	1049*	223*	218	218	208	6705		1457R	88
1A	960		129	129	119	8302		517R	-33

09 827/828 445330.212N 0931238.731W

A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
1A	861		31	33	20	-7094	-6106	500R	31
1A	859		29	31	18	-1692	-704	280R	32
1A	839		9	11	-2	450	1438	0R	4
1A	850		20	22	9	456	1444	319R	15
1A	839		9	11	-2	624	1611	483L	1
1A	860		30	32	19	821	1808	608R	18
1A	875		45	47	34	1173	2161	597R	26
1A	853		23	25	12	1310	2298	154L	1
1A	875		45	47	34	1453	2441	525R	20
1A	869		39	41	28	1529	2516	266R	12
1A	885		55	57	44	1931	2919	719R	20
1A	879		49	51	38	2233	3221	542R	8
1A	907		77	79	66	2866	3854	608R	24
1A	921		91	93	80	3360	4348	881R	28
1A	949		119	121	108	4564	5552	522R	32
1A	990		160	162	149	8797	9785	1633R	-12
1A	1158		328	330	317	13808	14796	1424L	38

tructing height in mobile crane area.

0C0264

AIRPORT ELEVATION 841

11L PIR 839/839 445334.746N 0931314.745W 3

OBJECT	LAT	LONG
OL ON GLIDE SLOPE	445327.26	0931248.40
OL ON GLIDE SLOPE	445330.77	0931256.21
ANTENNA ON BUILDING	445338.47	0931328.77
FENCE	445347.18	0931325.68
LIGHT STANDARD	445350.12	0931331.65
TREE	445345.51	0931354.18
TREE	445344.58	0931355.28
TREE	445356.71	0931356.16

29R PIR 819/823 445252.632N 0931137.476W 1

OBJECT	LAT	LONG
OL ON GLIDE SLOPE	445330.77	0931256.21
OL ON GLIDE SLOPE	445327.26	0931248.40
ANTENNA ON BUILDING	445248.51	0931134.93
TREE	445246.89	0931134.68
OL ON SIGN	445246.46	0931133.95
TREE	445244.82	0931129.14
TREE	445228.99	0931009.07

11958

A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
1A	859		20	20	18	-2015		339L	31
1A	881		42	42	40	-1349		350L	49
1A	856		17	17	15	1059		203R	-1
1A	857		18	18	16	1327		666L	-5
1A	871		32	32	30	1849		698L	-1
1A	917		78	78	76	2992		545R	22
1A	900		61	61	59	3010		667R	5
1A	914		75	75	73	3703		350L	5

12106

A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
1A	881		62	58	40	-6851		350R	49
1A	859		40	36	18	-6185		339R	31
1A	825		6	2	-16	374		261L	3
1A	835		16	12	-6	474		392L	11
1A	826		7	3	-15	542		402L	1
1A	830		11	7	-11	924		364L	-3
1A	943		124	120	102	6682		1268R	-6

OC0264

AIRPORT ELEVATION 841

11R PIR 841/841 445316.161N 09314 2.055W 3012001

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
ROD ON OL GLIDE SLOPE	445226.58	0931218.23	1A	859		18	18	18	-8997		400R	43
OL ON DME	445228.52	0931223.16	1A	835		-6	-6	-6	-8591		417R	17
ROD ON OL TRANSMISSOMETER	445245.31	0931303.05	1A	842		1	1	1	-5254		459R	17
ROD OL OL TRANSMISSOMETER	445247.15	0931305.57	1A	842		1	1	1	-5002		394R	16
ROD ON OL TRANSMISSOMETER	445300.73	0931338.76	1A	849		8	8	8	-2246		463R	17
ROD ON OL TRANSMISSOMETER	445302.57	0931341.15	1A	849		8	8	8	-2002		393R	16
OL ON GLIDE SLOPE	445307.50	0931352.72	1A	883		42	42	42	-1030		400R	46
TREE	445313.15	0931407.05	1A	851		10	10	10	148		448R	10
ANTENNA ON BUILDING	445322.32	0931410.44	1A	850		9	9	9	840		218L	-4
TREE	445317.33	0931422.49	1A	875		34	34	34	1318		664R	12
ROAD (N)	445323.10	0931418.00	1A	839		-2	-2	-2	1346		4L	-25
TREE	445318.35	0931425.70	1A	886		45	45	45	1569		696R	18

OC0264

AIRPORT ELEVATION 841

29L PIR 813/823 445224.798N 09312 3.451W 1212125

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
TREE	445313.15	0931407.05	1A	851		38	28	10	-10148		448L	10
OL ON GLIDE SLOPE	445307.50	0931352.72	1A	883		70	60	42	-8970		400L	46
ROD ON OL TRANSMISSOMETER	445302.57	0931341.15	1A	849		36	26	8	-7998		393L	16
ROD ON OL TRANSMISSOMETER	445300.73	0931338.76	1A	849		36	26	8	-7754		463L	17
ROD OL OL TRANSMISSOMETER	445247.15	0931305.57	1A	842		29	19	1	-4998		394L	16
ROD ON OL TRANSMISSOMETER	445245.31	0931303.05	1A	842		29	19	1	-4746		459L	17
OL ON DME	445228.52	0931223.16	1A	835		22	12	-6	-1408		417L	17
ROD ON OL GLIDE SLOPE	445226.58	0931218.23	1A	859		46	36	18	-1003		400L	43
APPROACH LIGHT	445221.82	0931156.06	1A	820		7	-3	-21	612		19R	-1
OL ON LOCALIZER	445220.86	0931154.37	1A	821		8	-2	-20	766		0L	-3
PIPE ON BUILDING	445225.40	0931149.50	1A	825		12	2	-16	826		575R	-1
TREE	445214.85	0931148.02	1A	838		25	15	-3	1473		282L	-1
TREE	445211.44	0931150.62	1A	843		30	20	2	1493		674L	4
OL ON POLE	445222.11	0931140.79	1A	844		31	21	3	1535		617R	4
TREE	445222.74	0931139.66	1A	851		38	28	10	1572		714R	11

OC0264

AIRPORT ELEVATION 841

ARP 445303.234N 0931253.522W

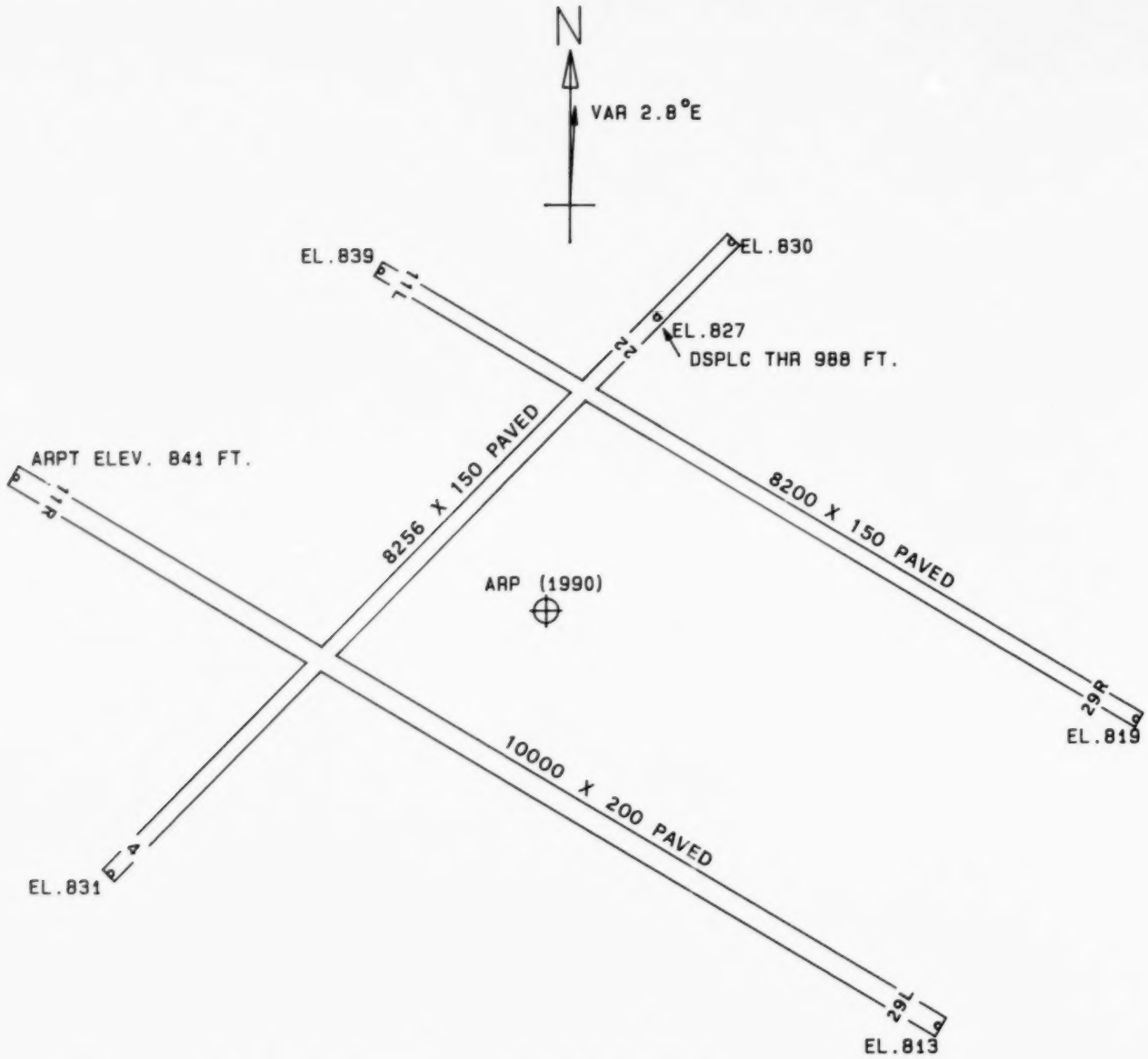
OBJECT	LAT	LONG	A	ELEV	AGL	HAA	MAG BEARING	DISTANCE
ANTENNA ON OL ATC TOWER	445317.86	0931316.32	1A	974		133	309 16	2211
FLOODLIGHT	445259.37	0931219.52	1A	885		44	96 17	2479
OL ON HANGAR	445325.00	0931316.90	1A	899		58	319 50	2774
FLOODLIGHT ON HANGAR	445311.59	0931331.22	1A	874		33	284 31	2843
OL ON HANGAR	445328.70	0931316.49	1A	886		45	324 32	3064
ROD ON ANEMOMETER	445258.07	0931336.49	1A	858		17	257 36	3138
OL ON STACK	445329.51	0931318.16	1A	881		40	323 31	3198
TREE	445255.17	0931203.66	1A	855		14	100 0	3682
OL ON BUILDING	445340.34	0931240.96	1A	903		62	10 44	3865
TREE	445308.83	0931158.31	1A	876		35	79 5	4015
FLOODLIGHT	445251.40	0931152.55	1A	850		9	102 27	4551
FLOODLIGHT	445245.73	0931154.17	1A	917		76	109 44	4627
ANTENNA ON HANGAR	445238.33	0931158.26	1A	940		99	119 34	4711
VORTAC	445254.95	0931358.79	1A	885		44	257 5	4774
TREE	445221.28	0931222.15	1A	889		48	149 12	4812
TREE	445347.33	0931227.70	1A	919		78	19 48	4837
OL ON GLIDE SLOPE	445302.78	0931146.23	1A	859		18	87 44	4845
POLE	445347.65	0931321.50	1A	892		51	333 5	4929
SIGN	445348.98	0931326.04	1A	887		46	330 24	5191
TREE	445300.75	0931136.99	1A	866		25	89 49	5517
TREE	445311.61	0931409.42	1A	884		43	276 2	5530
TREE	445310.13	0931409.98	1A	910		69	274 27	5549
TREE	445245.68	0931137.90	1A	843		2	105 17	5728
TREE	445242.89	0931137.95	1A	868		27	107 56	5818
TREE	445259.25	0931131.35	1A	859		18	91 5	5930
TREE	445314.35	0931416.65	1A	906		65	277 52	6091
TREE	445359.11	0931216.57	1A	910		69	22 22	6253
TREE	445300.87	0931125.11	1A	885		44	89 21	6371
TREE	445315.74	0931420.27	1A	906		65	278 40	6373
TREE	445225.71	0931142.34	1A	865		24	123 45	6381
TREE	445213.32	0931157.35	1A	857		16	138 32	6475
TREE	445212.38	0931157.85	1A	875		34	139 18	6527
ANTENNA ON OL RTR TOWER	445236.16	0931416.26	1A	892		51	242 29	6558

AIRPORT ELEVATION 841

ARP 445303.234N 0931253.522W

OBJECT	LAT	LONG	A	ELEV	AGL	HAA	MAG BEARING	DISTANCE
TREE	445315.97	0931423.21	1A	922		81	278 30	6585
VENT ON BUILDING	445402.96	0931215.74	1A	922		81	21 25	6632
TREE	445403.59	0931210.66	1A	909		68	23 59	6848
LIGHT STANDARD	445211.28	0931152.14	1A	843		2	137 10	6872
TREE	445318.69	0931428.62	1A	910		69	280 5	7024
ANTENNA ON BUILDING	445128.72	0931316.62	1A	1026	216	185	187 4	9715
ANTENNA ON OL BUILDING	445135.05	0931409.89	1B	977		136	208 50	10488
ANTENNA ON BUILDING	445120.65	0931333.90	1A	1042	232	201	192 51	10789
TREE	445240.21	0931007.32	1B	1002		161	98 13	12193
TREE	445233.61	0931007.73	1A	982		141	101 17	12310
OL STACK	445450.20	0931131.65	1A	1019	213	178	25 44	12333
TREE	445240.70	0931003.35	1B	1002		161	97 44	12465
MOBILE CRANE	445116.58	0931423.93	1A	1054*	239*	213	208 17	12612
OL ON RADIO TOWER(C OF 3)	445358.49	0931014.76	1A	1006	206	165	61 6	12727
STACK ON OL BUILDING	445509.91	0931151.31	1A	1040	235	199	16 26	13589
ANTENNA ON TOWER	445253.47	0931607.20	1B	1004		163	263 10	13981
OL ON STANDPIPE	445208.41	0930851.58	2C	1110		269	104 51	18286

*Probable maximum obstructing height in mobile crane area.



TOUCHDOWN ZONE RUNWAY	ELEVATION
4	831
22	828
11L	839
29R	823
11R	841
29L	823

MINNEAPOLIS-ST PAUL INTRNTL (WOLD-CHAMBERLAIN) A/P

MINNEAPOLIS, MINNESOTA

(NOT TO SCALE)